UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAAKI YAMANAKA,
HIROSHI KOYAMA and YASUHIRO UEDA

Appeal No. 2005-2639
Application 08/855,905

ON BRIEF

Before KIMLIN, GARRIS and WARREN, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 1 and 28 through 49, all of the claims in the application.

Claim 1 illustrates appellants' invention of a synthetic paper, and is representative of the claims on appeal:[1]

1. A synthetic paper which comprises a film obtained by oxidizing the surface of a film obtained by stretching a resin film comprising as the base material a resin composition comprising

100 parts by weight of resin components and from 10 to 250 parts by weight of component E: fine inorganic particles;

said resin components comprising, based on the total weight of the resin components;

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[1] We have reproduced claim 1 as it stands of record as of the amendment filed November 14, 2003.

55-90 wt% of component A: a polypropylene resin,

5-40 wt% of component B: a polyetheresteramide containing aromatic rings which is derived from

component b1: a polyamide having a number-average molecular weight of from 200 to 5,000 and containing a carboxyl group at each end, and

component b2: an alkylene oxide adduct of bisphenol having a number-average molecular weight of from 300 to 5,000,

3-20 wt% of component C: a polyamide resin, and

1-20 wt% of component D: at least one modified low-molecular weight polypropylene selected from the group consisting of

component d1: an acid-modified low-molecular weight polypropylene having a number-average molecular weight of from 800 to 25,000 and an acid value of from 5 to 150,

component d2: a hydroxy-modified low-molecular weight polypropylene having a number-average molecular weight of from 800 to 25,000 and a hydroxyl value of from 5 to 150, and

component d3: an ester-modified low-molecular weight polypropylene obtained by partly or wholly esterifying component d1 with a polyoxyalkylene compound and having a number-average molecular weight of from 1,000 to 28,000;

said stretching being conducted at a temperature lower than the melting point of the propylene resin as component A, said stretching and oxidation of said stretched film generating ultrafine cracks on a surface of said stretched film through which component B as permanent antistatic agent appears and possessing gloss of from 15 to 60% and opaqueness of from 83 to 96%.

The references relied on by the examiner are:

Takashi et al. (Takashi)	4,318,950	Mar. 9, 1982
Ohba et al. (Ohba)	5,233,924	Aug. 10, 1993
Ueda et al. (Ueda) (published European Patent Application)	0 613 919	Sep. 7, 1994

The examiner has rejected appealed claims 1 and 28 through 49 under 35 U.S.C. § 103(a) as being unpatentable over Takashi in view of Ohba and Ueda (answer, pages 3-7).

Appellants argue independent claims 1, 28 and 29 as a group and present further argument with respect to claims 30 through 34, 38 and 46 through 49. Thus, we decide this appeal based on claim 1 as representative of the appealed claims except claims 30 through 34, 38 and 46 through 49 to the extent argued in the brief and reply brief. 37 CFR § 41.37(c)(1)(vii) (September 2004).

We affirm.

Rather than reiterate the respective positions advanced by the examiner and appellants, we refer to the answer and to the brief[2] and reply brief for a complete exposition thereof.

Opinion

We have carefully reviewed the record on this appeal and based thereon find ourselves in agreement with the supported position advanced by the examiner that, *prima facie*, the claimed etch chamber encompassed by appealed claims 1, 30 through 34, 38 and 46 through 49 would have been obvious over the combined teachings of Takashi, Ohba and Ueda to one of ordinary skill in this art at the time the claimed invention was made. Accordingly, since a *prima facie* case of obviousness has been established, we again evaluate all of the evidence of obviousness and nonobviousness based on the record as a whole, giving due consideration to the weight of appellants' arguments in the brief and reply brief, and the objective evidence in the specification and in the four declarations under 37 CFR § 1.132 of appellant Yamanaka[3] to the extent relied on in the brief and reply brief. *See generally, In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

As an initial matter, we interpret claim 1 by giving the terms thereof the broadest reasonable interpretation in their ordinary usage as they would be understood by one of ordinary skill in the art in light of the written description in the specification, unless another meaning is intended by appellants as established in the written description of the specification, and without reading into the claims any limitation or particular embodiment disclosed in the specification. *See, e.g., In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The plain language of

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[2] We consider the brief filed October 27, 2004. See the communication filed February 10, 2005.

[3] Yamanaka Declaration, executed October 6, 1999, filed October 22, 1999 (Yamanaka I declaration); Yamanaka Supplemental Declaration, executed March 22, 2001, filed April 9, 2001 (Yamanaka II declaration); Yamanaka Second Supplemental Declaration, executed July 12, 2002, filed August 5, 2002 (Yamanaka III declaration); and Yamanaka Third Supplemental Declaration, executed May 19, 2003, filed May 29, 2003 (Yamanaka IV declaration).

claim 1 encompasses a synthetic paper which comprises at least one polypropylene resin film that is stretched in any manner at a temperature lower than the melting point of the polypropylene resin used in the film and oxidized in any manner, wherein the oxidation and stretching generate ultrafine cracks on the surface of the film through which the permanent antistatic agent appears, and has a gloss and an opaqueness in the specified ranges. The at least one polypropylene resin film comprises at least component E, which is fine inorganic particles in the specified parts by weight range, as well as a base polypropylene resin composition that comprises at least resin components A through D, in the specified parts by weight ranges. The resin components further comprise at least any polypropylene resin as component A; a polyetheresteramide containing aromatic groups as the permanent antistatic agent component B, wherein the polyetheresteramide is derived in any manner from any polyamide with a carboxyl group at each end, designated component b1, and any alkylene oxide adduct of any bisphenol, designated component b2; any polyamide as component C; and at least one low-molecular weight polypropylene as component D selected from the group consisting of polypropylene that has been acid-modified by any manner of acid, designated component d1, hydroxy-modified, designated as component d2, and ester-modified by any manner of ester, designated component d3.

The open-ended term "comprising," used in transition and in the body of the claim, opens the claim to include synthetic paper which contains any manner of additional components in the polypropylene resin film, including additional components in the polypropylene resin composition, as well as any manner of layers in addition to the polypropylene resin film. In this respect, appellants disclose in the written description in the specification, for example, that the polypropylene resin composition can contain additional components, such as other olefins in component A, and additives, such as surfactants (e.g., pages 7 and 20), and can be laminated to other films (e.g., pages 22-23). *See generally*, *Genentech Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997), citing *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981; *Exxon Chem. Pats., Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555, 35 USPQ2d 1801, 1802 (Fed. Cir. 1995) ("The claimed composition is defined as comprising - meaning containing at least - five specific ingredients."); *Baxter*, 656 F.2d at 686-87, 210 USPQ at 802-03 (CCPA 1981) ("As long as one of the monomers in the reaction is propylene, any other

monomer may be present, because the term 'comprises' permits the *inclusion* of other steps, elements, or materials.").

We find that Takashi would have acknowledged that it was known in the art to prepare synthetic papers from thermoplastic resin film which is oriented or stretched under elevated temperatures, contains filler and can be one layer of a laminate (col. 1). Takashi would have disclosed to one of ordinary skill in this art a laminated synthetic paper for writing and printing having a base film layer and a paper-like film layer on at least one side of the base film layer. The base film layer is a thermoplastic resin film which contains fine inorganic particulate filler and is biaxially stretched or oriented. The paper-like film layer is a thermoplastic resin film which can contain up to 65 weight percent of fine inorganic particulate filler and is uniaxially stretched or oriented at elevated temperatures. The filler and the stretching or orientation creates open cells or microvoids open to the surface and elongated microvoids distributed within the film, "with fibrous-like portions of the resin among the microvoids to define a cellular, fibrous structure," which determines the gloss and opaqueness of the film. The surface of the paper-like resin film layer is polarized, that is, oxidized, by a corona discharge treatment to improve ink adhesion during printing. The base film layer can be a polyolefin resin, including polyethylene, polypropylene and mixtures thereof, and contains additional ingredients, including the filler. The paper-like film layer can be the same resins and contains the filler as well as additional ingredients including stabilizers, dispersing agents and antistatic agents, wherein the antistatic agents can be present in the amounts of about 0.1 to about 1.5 weight percent of the film composition. The manufacturing conditions, including extruder molding and stretching temperatures, for the exemplified synthetic papers, including polypropylene and polypropylene/polyethylene base film and paper-like film layers, are set forth in Table III. The properties of the exemplified films and the effect of filler content thereon, including gloss and opaqueness within the ranges of 15 to 60% and 83 to 96%, respectfully, are set forth in Tables V, VII(a) and VII(b). The synthetic paper can be used for, among others, "high grade printing paper." *See*, e.g., col. 2, ll. 20-64, col. 3, l. 31, to col. 8, l, 27, Tables I(a) through VII(b), col. 17, ll. 31-36, and col. 18, l. 52, to col. 19, l. 25.

We find no disclosure of "ultrafine cracks" in Takashi. However, Ohba acknowledges that Takashi would have disclosed "[a] synthetic paper obtained by stretching a polypropylene film containing from 8 to 65% by weight of an inorganic fine powder," and that "[s]ynthetic paper of this type have a microstructure in which fine voids are formed around inorganic fine powder and a vast number of streaking cracks are formed on the surface . . . [and] is not only lightweight but has excellent printing ink receptivity, pencil writability, water resistance, etc." (col. 1, ll. 15-30). We note that Takashi, Ohba and the present application are commonly assigned. *See* brief (page 1) and Yamanaka I declaration (¶ 5., page 2, second paragraph).

We find that Ueda would have disclosed a particular class of "polyetheresteramide with high heat resistance, permanently antistatic property and superior compatibility with thermoplastic resins" compared with other polyetheresteramides, wherein "[t]he polyetheresteramide . . . consists essentially of the two components of a polyamide oligomer with carboxylic chain ends . . . and a bisphenol compound with oxyalkylene units," the number-average molecular weight range of the polyamide being the same as specified in appealed claim 1 while that of the alkylene oxide adduct of bisphenol falls within that specified in appealed claim 1. Ueda would have taught that compatibility of the polyetheresteramide with thermoplastic resins, of which polypropylene is preferred, can be improved with acid modified, hydroxy-modified and ester-modified vinyl polymers, including low-molecular weight polypropylene. The reference further would have taught that the "polyetheresteramide is poor in surface orientation" in crystalline polyolefin resins, such as polypropylene, which "can be improved" by the use of a polyamide resin with "the desired antistatic property being effected with a small amount of polyetheresteramide." The reference would have disclosed that compositions can contain thermoplastic resin in the amount of 60 to 97% of the weight of the polyetheresteramide, and compatibilizers can be up to 40% by weight of the resin and the polyetheresteramide. Preferred composition 2 comprises a polyolefin, a polyetheresteramide, a polyamide resin and a compatibilizer in amounts that encompass the ranges for corresponding components A through D of appealed claim 1. The compositions can be prepared by extrusion and can contain additives such as fillers and surfactants. The exemplified compositions were tested by measuring the surface resistivity of unwashed and water washed pieces prepared by injection molding,

establishing that the polyetheresteramide antistatic agent is "permanent" as it does not wash out. *See*, e.g., abstract, page 2, ll. 3-56, page 3, l. 3, to page 5, l. 57, page 7, l. 21, to page 8, l. 9, page 8, ll. 50-56, pages 9-10, and page 11, ll. 7-24.

We further find that appellants acknowledge that it was known that antistatic properties of synthetic papers containing polypropylene films, such as those of Takashi, must be improved for purposes of paper feeding and discharge from a printer and "to be printable by gravure printing, offset printing, flexography, etc.," and that the use in such paper of "low-molecular weight antistatic agents of the kneading type, e.g., sorbitan monooleate or glycerol monostearate" has the "drawback that the antistatic properties do not last for long and there is a desire in the market for an improvement in this respect" (specification, pages 1-2).

The examiner submits that Takashi "does not teach the claimed antistatic composition" but Ueda does, and that one of ordinary skill in the art would have used the polyetheresteramide of Ueda in the synthetic polypropylene papers of Takashi because, as disclosed by Ueda, the polyetheresteramide is known to be compatible with polypropylene, heat [resistant], maintains . . . antistatic properties permanently . . . and does not rinse away in the presence of water" when used in amounts "sufficient for providing polypropylene matrixes with antistatic properties" (answer, pages 3-5). The examiner further submits that one of ordinary skill in the art would have used sufficient amounts of polyamide in order to increase the surface orientation of the polyetheresteramide, and of compatibilizers as taught by Ueda (*id.*, pages 5-7).

Appellants argue that the applied prior art does not suggest the claimed synthetic paper and its offset printing properties and antistatic properties, pointing out that Ueda does not disclose a stretched film having such properties (brief, pages 5-6). Appellants alleges that "ink adhesion property during offset printing is poor" without the "claimed antistatic resin" and without "inorganic filler," as shown in specification Comparative Examples 1 and 2, respectively, and that without "stretching," the "surface resistivity, ink adhesion and . . . paper feeding/discharge are all poor," as shown in specification Comparative Example 3, whereas the specification claimed examples "exhibit both excellent permanent antistatic properties and offset printability" (*id.*, page 6). Appellants further submit, in this respect, that Ueda does not suggest that orienting or stretching a film of antistatic agent containing olefin resin will provide

"enhanced antistatic effect" or "disclose evaluation of offset printability" of such film (*id.*, page 7). According to appellants, specification Comparative Examples 2 and 3 show that orienting or stretching decreases surface resistivity even if the claimed antistatic agent is used, thus establishing that "the surprising benefit of orienting on antistatic properties has been discovered for the very first time by the present invention" (*id.*). Appellants further point out that Takashi discloses that a low-molecular weight antistatic agent can be used in the amount of "only from 0.1 to 1.0 parts by weight" while the claimed high-molecular weight permanent antistatic agent is used at "5 to 40% by weight based on the weight of the resin component," providing results unexpected from the references (*id.*, pages 7-8; original emphasis deleted).

Appellants still further submit that "it is not obvious to use the filler and processing taught in [Takashi] with the polymer and antistatic compound taught in [Ueda]" (*id.*, page 8). Appellants contend that Ueda uses resin compositions containing the polyetheresteramide to injection mold solid articles in which the surface is "rich" in the antistatic agent because of the polyamide, whereas the claimed film is stretched, thus orienting the antistatic agent to improve resistivity, which is a different mechanism (*id.*, page 9). Appellants further point out that the molded articles of Ueda contain no filler, and thus no voids, and therefore "the molded articles are transparent or translucent" (*id.*, original emphasis deleted). Appellants contend that Experiment 5 in the Yamanaka III declaration, which is based on using the composition of Ueda Example 43 to form a film "under the conditions of" Takashi, establishes that a "biaxially stretch film could not be obtained because the sheet broke" in the stretching machine "because polypropylene (PP) of grade suitable for injection molding has MFR of 9g/min., high flowing property and low melting tension" (*id.*, pages 9-10; original emphasis deleted).

Appellants submit the following with respect to the four Yamanaka declarations. Appellants contend that the Yamanaka I declaration establishes that when "0.3 parts" of "a low molecular weight antistatic agent" is used in a synthetic paper as taught by Takashi, the antistatic property "improved slightly" and "paper feeding/discharge in offset printing" was "poor," and when "16.7 parts by weight based on the resin components" of the same agent was used in amounts within the appealed claims, "the rolls during film formation became tacky and film

formation was hence difficult" and upon washing, the surface resistivity of the film deteriorated because the antistatic agent "dissolved away" (*id.*, page 12).

Appellants contend that the Yamanaka II declaration was filed in view of the examiner's findings that "there were too many variables in the comparative testing of the Yamanaka I declaration, with the proper comparison being to a synthetic paper of [Takashi] having a different antistatic agent from the claimed polyetheresteramide," and that "for the Comparative Examples 2 and 3 of the present invention to comparatively show the effect of stretching, they should be conducted with respect to films which have undergone the same surface treatment" (*id.*, page 13). According to appellants, the results show that stretching "is essential for the effective development of antistatic properties," the corona treatment does not effect surface resistivity and feeding/discharge properties, and "thus, the extrudate sheets obtained from the composition disclosed by [Ueda] had insufficient antistatic properties" (*id.*, pages 13-14; original emphasis deleted).

Appellants contend that the Yamanaka III declaration involves a comparison "between Example 12 of [Takashi] with both polyetheresteramide and other antistatic agent against the inventive paper," wherein Experiment 1 is Takashi Example 12; Experiment 2 is Takashi Example 12 with "a polyetheresteramide antistatic agent;" Experiment 3 is Experiment 2 with "a much larger amount of 20 parts by weight" of the agent; and Experiment 4 is a claimed composition (*id.*, pages 14-15). According to appellants, only the claimed composition provides improved surface resistivity after washing with satisfactory printability (*id.*, page 15). Appellants again point out that Experiment 5 shows that it is "impossible" to prepare "a film comprising a composition taught by [Ueda] according to the processing conditions of [Takashi]" (*id.*).

Appellants contend that the Yamanaka IV declaration involves comparisons establishing the "improvement of the claimed invention over any possible combination of" Takashi and Ueda, wherein Experiments 1-4 prepare "different-layer films" with the composition of Takashi Example 12; Experiments 5-7 prepare "different-layer films" according to specification Example 1; and Experiment 8 involves "a three-layer film prepared according to [Takashi] but with a polyetheresteramide antistatic agent in large amounts" (*id.*, pages 15-16). According to appellants, the results show that only the "claimed invention (Experiment 7)" had good resistivity

and offset printability, and "a paper prepared according to [Takashi] and containing an antistatic agent of the type and amount of [Ueda] still fail to result in good resistivity and printability (Experiment 8)" (*id.*, page 16).

Appellants argue that the examiner's finding that Experiment 2 of the Yamanaka IV declaration does not represent the combination of Takashi and Ueda because Ueda teaches that other components are present with the polyetheresteramide, is incorrect because Ueda is relied on for the polyetheresteramide and not the other components, pointing out that the examiner also found the showing that a composition of Ueda could not be used to prepare a film in the Yamanaka III and IV declarations to be unrepresentative of the prior art (*id.*). Appellants further argue that the claimed component b2 of the polyetheresteramide component B is present in the polyetheresteramide representing Ueda in the comparative compositions of the Yamanaka III and IV declarations (*id.*, pages 16-17).

The examiner responds that Takashi and not Ueda is relied on to establish that compositions containing antistatic agents are used in preparing stretched film for the offset printing arts (answer, page 7). The examiner finds that the results obtained with the specification Comparative Examples would have been expected by one of ordinary skill in this art because this person would have recognized that in Comparative Example 1, no anti-static agent will result in poor ink adhesion "[a]s noted by appellants on page 1 of the specification;" in Comparative Example 2, no inorganic filler would result in poor ink adhesion and offset printing as "Takashi teaches that the filler is necessary to create micro-voids that improve the ink adhesion properties;" and in Comparative 3, no stretching would result in the same poor properties as "Takashi teaches that the filler is necessary to orient a surface layer . . . to improve the ink adhesion properties" (*id.*, pages 8-9). The examiner finds the Yamanaka II declaration "insufficient to establish unexpected results because Appellants have not compared . . . the closest prior art" which "is an embodiment of Takashi that comprises an antistatic agent other than the claimed antistatic agent" (*id.*, pages 9-10; *see also* pages 14-15). Thus, the examiner considers appellants' supported contention "that the effect of orienting the claimed composition decreases the surface resistivity of the resin composition . . . [is an] unexpected benefit of

orientation . . . previously unknown" to constitute recognition of "a latent property of the synthetic paper taught in Takashi" (*id.*).

The examiner submits that Ueda provides the motivation to use the combination of polyetheresteramides, polyamides and modified polypropylene and the amounts thereof in the polypropylene film of Takashi, arguing that teachings of Ueda are not limited to compositions for molded articles but encompass any resin composition containing the polyetheresteramide antistatic agent taught in the reference (*id.*, pages 10-12). The examiner further argues that Takashi, not Ueda, teaches polypropylene film contains filler and voids (*id.*, page 12). The examiner finds that Experiment 5 of the Yamanaka III declaration involves "a film that was attempted to be produced by using the composition of Ueda under the conditions of Takashi" wherein "a biaxially stretched film could not be obtained," according to appellants, because of the particular polypropylene used to prepare the film (*id.*, pages 12-13; *see also* pages 15-16). The examiner takes the position that the showing is not based on the closest prior art because the rejection is based on Takashi and not on the biaxially orienting film obtained from a particular polypropylene resin taught in Ueda (*id.*, page 13).

The examiner appears to find that the two experiments in the Yamanaka I declaration show that the polypropylene film would have retained the polyetheresteramide component after washing which would have been expected by one of ordinary skill in the art from the teachings of Ueda (*id.*, page 14). The examiner finds that in the Yamanaka III declaration, three experiments are based on Takashi Example 12, two with polyetheresteramide component B and one with another antistatic agent, wherein the former two experiments do not include polyamide components C and modified low-molecular weight polypropylene component D with polyetheresteramide component B. According to the examiner, the showing that in comparison to a claimed polypropylene paper, each of the prior art polypropylene papers "has high surface resistivity after washing . . . is not unexpected in view of the teachings of Ueda . . . that a composition comprising components A-D will retain its antistatic properties after washing" and one of ordinary skill would "expect a sheet with high resistivity to exhibit poor offset printing" as disclosed by appellants on page 1 of the specification (*id.*, page 15). For the same reasons, the examiner finds that in the Yamanaka IV declaration, the differences in reported results between

polypropylene papers as claimed and according to the teachings of Takashi are not unexpected because of the difference in the presence and absence of components B, C and D, with respect to Experiments 1 through 7, and with respect to Experiment 8, the presence of component B without components C and D (*id.*, pages 16-17).

We find substantial evidence in the record supporting the examiner's position. Appellants acknowledge in the specification that the polypropylene film synthetic paper taught by Takashi to include an antistatic agent up to about 1.5 weight percent of the film composition, is deficient in antistatic static properties that affect the performance of the paper in the printer and in offset printing, which properties are exhibited on the surface of the polypropylene film. It is well settled that "[t]he significance of evidence that a problem was known in the prior art is, of course, that knowledge of a problem provides a reason or motivation for workers in the art to apply their skill to its solution." *In re Nomiya*, 509 F.2d 566, 574, 184 USPQ 607, 613 (CCPA 1975). Therefore, we are of the view that one of ordinary skill in this art would have considered other antistatic agents to address the known antistatic problem in the polypropylene synthetic papers of Takashi.

We agree with the examiner that one of ordinary skill in this art would have considered the particular class of polyetheresteramides of Ueda in view of the teachings therein that such compounds are heat resistant, permanent antistatic agents which can be combined with polyamides for surface orientation and with modified low-molecular polypropylenes for compatibility when used in thermoplastic resin compositions, preferably polypropylene resin compositions. Indeed, Ueda would have taught that the polyetheresteramide antistatic agents do not wash out of the surface of injection molded polypropylene articles, and that polypropylene compositions containing the polyetheresteramides, polyamides and modified low-molecular weight polypropylene can contain further ingredients including "fillers" and "surfactants," which are used in the polypropylene layers of the synthetic paper of Takashi, and can be extruded and molded at temperatures which are used in processing, including stretching, the polypropylene layers by Takashi. Ueda would have further disclosed preferred weight percent ranges for the resin components polypropylene, polyetheresteramide, polyamide and modified low-molecular weight polypropylene that fall within the corresponding ranges in the appealed claims.

Thus, *prima facie*, the combined teachings of Takashi, Ohba and Ueda would have reasonably suggested to one of ordinary skill in this art to modify the polypropylene synthetic papers taught by Takashi by using in place of the antistatic agents in the polypropylene resin compositions to form the layers disclosed in that reference, the polyetheresteramide permanent antistatic agents along with polyamides for surface orientation thereof and modified low-molecular weight modifiers as compatibilizers therefor taught by Ueda in the reasonable expectation of improving the antistatic properties of the resulting polypropylene synthetic papers with the permanent antistatic agent and thus, the paper handling and offset printing properties thereof. Furthermore, the amount of these ingredients used in the polypropylene resin compositions of Takashi would have been adjusted by one of ordinary skill in this art based on the teachings of Ueda to determine workable and optimum ranges to obtain the desired antistatic properties and thus, paper handling and offset printing properties. Accordingly, *prima facie*, one of ordinary skill in this art routinely following the combined teachings of the applied references would have reasonably arrived at the claimed polypropylene synthetic paper encompassed by appealed claim 1, including each and every limitation thereof arranged as required therein, without recourse to appellants' specification. *See In re Corkill*, 771 F.2d 1496, 1497-1500, 226 USPQ 1005, 1006-08 (Fed. Cir. 1985); *In re Longi*, 759 F.2d 887, 897, 225 USPQ 645, 651-52 (Fed. Cir. 1985); *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980), and case cited therein ; *In re Skoll*, 523 F.2d 1392, 1397-98, 187 USPQ 481, 484-85 (CCPA 1975); *In re Castner*, 518 F.2d 1234, 1238-39, 186 USPQ 213, 217 (CCPA 1975); *In re Lintner*, 458 F.2d 1013, 1015-16, 173 USPQ 560, 562-63 (CCPA 1972); *see also In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1680-81 (Fed. Cir. 1988) ("Obviousness does not require absolute predictability of success. . . . There is always at least a possibility of unexpected results, that would then provide an objective basis for showing the invention, although apparently obvious, was in law nonobvious. [Citations omitted.] For obviousness under § 103, all that is required is a reasonable expectation of success. [Citations omitted.]"); *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) ("The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that [the claimed process] should be carried out and would have a

reasonable likelihood of success viewed in light of the prior art. [Citations omitted] Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure."); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)("The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art."); *In re Aller*, 220 F.2d 454, 456-58, 105 USPQ 233, 235-37 (CCPA 1955) ("[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.").

Therefore, the burden falls upon appellants to establish that the claimed polypropylene synthetic papers encompassed by claim 1 patentably distinguish over the teachings of the applied prior art with effective argument and/or objective evidence. We agree with the examiner that appellants have not carried their burden.

We agree with the examiner that contrary to appellants' arguments, the thrust of the rejection is that one of ordinary skill in the art would have modified the polypropylene synthetic paper of Takashi by using the three component antistatic composition of Ueda, and not that one of ordinary skill in this art would have applied the methods of forming a synthetic paper taught by Takashi to particular compositions of Ueda. This is because the sole difference between the polypropylene synthetic paper encompassed by appealed claim 1 and taught by Takashi is the polyetheresteramide antistatic agent and associated polyamides and modified low-molecular weight polypropylenes facilitating the effective use of the agent in polypropylene. Indeed, Takashi would have taught that a fine organic particulate filler containing polypropylene paper-like film is stretched to develop microvoids in and on the surface of the film and is oxidized by corona discharge treatment to further improve ink adhesion on the surface, forming ultrafine cracks on the surface as acknowledged by Ohba, the film possessing gloss and opaqueness, all as required by appealed claim 1.

We find no evidence in the applied prior art raising the issue of whether one of ordinary skill in this art would have considered combining the teachings thereof to form polypropylene

synthetic paper from illustrative polypropylene resin compositions disclosed by Ueda by using only the processing steps of Takashi, which appellants address. This is because the stretching processing steps of Takashi are based on the presence of fine organic particulate filler in the polypropylene resin compositions in the amounts taught in the reference to form the microvoids and to provide gloss and opaqueness, and such filler, while encompassed by the generic teaching of "filler" by Ueda, is not included in the illustrative polypropylene resin compositions in that reference which, as appellants point out, are used in injection molding processes. On this record, we are of the opinion that even if one of ordinary skill in the art would have been motivated to use the processing steps of Takashi with the illustrative compositions of Ueda to prepare a polypropylene synthetic paper, this person would have modified the compositions of Ueda to contain the filler of Takashi in order to take advantage of the processing steps and obtain the synthetic paper properties taught by Takashi. This would have resulted in the same polypropylene resin compositions taught by Takashi, as this person would have further reasonably selected a polypropylene resin such as that disclosed in Takashi to produce a synthetic paper with the properties taught by the reference, and Ueda does not limit the properties of the thermoplastic resins, including the polypropylene resins, which can be used with the class of polyetheresteramides and the polyamides and modified low-molecular weight polypropylenes.

In this respect, as the examiner argues, Ueda provides both the particular polyetheresteramides permanent antistatic agents and the associated facilitating compounds to make the agents effective in polypropylene compositions as well as the motivation to use these compounds in polypropylene compositions in which a permanent antistatic property is desired, such as the polypropylene compositions used to prepared synthetic paper in Takashi as acknowledged by appellants in their specification. *See, e.g.*, *Skoll*, 523 F.2d at 1397, 187 USPQ at 484. We recognize that Ueda would have taught preferred amounts of the polyetheresteramide antistatic agent as a weight percent of the resin components while Takashi would have taught the amount of different antistatic agents as a weight percent of the resin components *and* the fine inorganic particulate filler. However, on this record, we find that when the amount of antistatic agent taught by Takashi is considered based on the resin composition alone, the actual amounts of antistatic agent used relative to the amount of resin components is not significantly different.

Thus, we determine that one of ordinary skill in this art would have adjusted the amount of polyetheresteramide used in the polypropylene resin compositions of Takashi based on the teachings of Ueda to determine workable and optimum ranges to obtain the desired antistatic properties and thus, the paper handling and offset printing properties of the resulting polypropylene synthetic paper desired in the art. *Aller*, 220 F.2d at 456-58, 105 USPQ at 235-37.

Accordingly, we are of the opinion that the closest prior art is Takashi and the combination of this reference with Ohba and Ueda is sufficient to establish the *prima facie* obviousness of the claimed polypropylene synthetic paper encompassed by appealed claim 1 within the meaning of § 103(a), as it is not necessary that all of the features of Takashi and Ueda must be incorporated one within the other for this purpose. *See Keller*, 642 F.2d at 425, 208 USPQ at 881.

We now consider the objective evidence in the specification and in the Yamanaka declarations relied on by appellants in the brief and reply brief to establish unexpected results. In this respect, appellants have the burden to submit an explanation or evidence establishing the practical significance of such results vis-à-vis the teachings of the applied references and why the results would have been considered unexpected, which burden is not carried by mere arguments of counsel. *See generally, In re Geisler*, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); *In re Merck*, 800 F.2d 1091, 1099, 231 USPQ 375, 381 (Fed. Cir. 1986); *In re Longi*, 759 F.2d 887, 897, 225 USPQ 645, 651-52 (Fed. Cir. 1985); *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972)("The affidavit and specification do contain allegations that synergistic results are obtained with all the claimed compositions, but those statements are not supported by any factual evidence other than that limited amount of evidence discussed above. This court has said . . . that mere lawyers' arguments unsupported by factual evidence are insufficient to establish unexpected results. [Citations omitted.] Likewise, mere conclusory statements in the specification and affidavits are entitled to little weight when the Patent Office questions the efficacy of those statements. [Citations omitted]"); *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972); *In re D'Ancicco*, 439 F.2d 1244, 1248, 169 USPQ 303, 306 (1971). Appellants can satisfy their burden of establishing patentable distinctness by directly or indirectly comparing a claimed polypropylene synthetic paper with a polypropylene synthetic

paper of Takashi which is the closest prior art, in a manner that can reasonably be considered to be a "side-by-side" comparison that addresses the thrust of the rejection. *See generally, In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) ("[W]hen unexpected results are used as evidence of nonobviousness, the results must be shown to be unexpected compared to the closest prior art. [Citation omitted.]"); *In re Burckel*, 592 F.2d 1175, 1179-80, 201 USPQ 67, 71 (CCPA 1979) (the claimed subject matter must be compared with the closest prior art in a manner which addresses the thrust of the rejection); *In re Blondel*, 499 F.2d 1311, 1317, 182 USPQ 294, 298 (CCPA 1974) ("Appellants' brief goes through a detailed, step-by-step analysis of the evidence in support of the conclusion to be drawn from the indirect comparison . . . ," establishing that the indirect evidence provided a reliable indication of the performance of the closest claimed and prior art compounds); *In re Dunn*, 349 F.2d 433, 439, 146 USPQ 479, 483 (CCPA 1965) ("[W]e do not feel it an unreasonable burden on appellants to require comparative examples relied on for non-obviousness to be truly comparative. The cause and effect sought to be proven is lost here in the welter of unfixed variables."). If the reported results reasonably appear to be no more than one of ordinary skill in the art would have reasonably expected from the teachings of Takashi and Ueda, in the absence of evidence explaining the practical significance of such results and establishing that the results are unexpected, the same would be indicative of obviousness rather than nonobviousness. *See, e.g., In re Hoffmann*, 556 F.2d 539, 541, 194 USPQ 126, 128 (CCPA 1977) (reference disclosed property argued to be unexpected); *Skoll*, 523 F.2d at 1397, 187 USPQ at 484 (reference suggested the desirability of substituting reagent for that used in the process of another reference); *In re Gershon*, 372 F.2d 535, 537-39, 152 USPQ 602, 604-05 (CCPA 1967) (references teach the superiority of using a reagent for a particular purpose).

Appellants rely on Comparative Example 1, in which the polypropylene synthetic paper contains *no* antistatic agent or any other ingredients including *filler*, and specification Comparative Examples 2 and 3, both of which contain the claimed polyetheresteramide, polyamide and modified low-molecular weight polypropylene but *lack filler* and are not corona discharge treated or uniaxially stretched, respectively, with respect to the teaching of Ueda. We are of the opinion that the examiner correctly finds that the results reported in specification Table

2 for these examples are not unexpected in view of the acknowledged use of an antistatic agent by Takashi and the requirement for such agent in the specification (page 1) with respect to the first example, and the teaching to use filler in the film and then stretch and oxidize by corona discharge treatment the film in Takashi with respect to the other two examples. Indeed, in the absence of an explanation of the practical significance of the results, we find no reasonable direct or indirect "side-by-side" comparison between these examples and the claimed specification examples which addresses the thrust of the rejection which is based on Takashi as the closest prior art and not Ueda, as we discussed above. Thus, on this record, we find little, if any, evidence that supports appellants' argument that the comparative examples establish the "excellent" properties of the claimed synthetic papers with respect to the prior art and that they discovered the benefit of orienting the film on antistatic properties. *Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358.

We find that declarant Yamanaka states in declaration I that Experiment 1 is a duplication of Takashi Example 2 (Takashi Tables I(a) and II(a)) in which an antistatic agent in the amount of 0.3 parts was used to prepare a three layer polypropylene synthetic paper as taught in the reference, and that Experiment 2 prepares a synthetic paper "in the same manner as in Example 1, except that instead of" the antistatic agent of Experiment 1, an unnamed material "was used an antistatic agent and the incorporation of the resin component in the surface layer was effected as set froth in Table 2" (pages 2-4). We find that the sole antistatic agent described at page 2, third full paragraph, for Experiment 1 is the antistatic agent stated to be replaced at page 4, first full paragraph, and the respective antistatic agents employed are *both* described as "low-molecular weight antistatic agent" in the explanation of the results at page 4, second full paragraph. Thus, the antistatic agent of Experiment 2 is not a polyetheresteramide and, therefore, not a claimed synthetic paper as found by the examiner (answer, page 14). Furthermore, presuming that the "low-molecular weight antistatic agent" is the same in each, we further find that contrary to the testimony of declarant Yamanaka, a comparison of declaration Tables 1 and 2 makes clear that there are other significant differences between the synthetic papers of Experiments 1 and 2 with respect to the components of the resin compositions, wherein the resin composition of

Experiment 2 includes unspecified components; the fine inorganic particulate filler; the thicknesses of all three layers; and stretching ratios.

We find that while declarant Yamanaka states that the two disparate synthetic papers in these Experiments are unacceptable based on the reported data in declaration Table 2, as argued by appellants, the practical effect of the evidence with respect to the thrust of the rejection has not been explained, and, indeed, there is no direct or indirect "side-by-side" comparison of a claimed synthetic paper with one representing Takashi. Thus, at best, the evidence in the Yamanaka I declaration establishes a result expected by one of ordinary skill in this art from the kind of antistatic agents employed in Takashi as acknowledged by appellants in the specification (pages 1-2).

We find that declarant Yamanaka states in declaration II that Experiments 1 and 2 were "conducted in the same manner as in" specification Comparative Examples 1 and 2, except that in the former, "corona discharge treated was carried out as a surface treatment," and in the latter, "corona discharge treatment[] was not carried out" (pages 1-2). Thus, as shown in declaration Table 1, the synthetic paper of Experiment 1 is uniaxially stretched and corona discharge treated, while the synthetic paper of Experiment 2 is neither stretched nor treated. We find it apparent from declaration Table 1 as we did for specification Comparative Examples 2 and 3 from specification Table 2 above, that the synthetic films of Experiments 1 and 2 both *lack filler*.

We find that in comparison to the results reported for specification Comparative Examples 1 and 2 in specification Table 2, declarant Yamanaka states that, using "X" as "poor" and "Δ" as "fair," the corona treatment in Experiment 1 improved the stretched film of Comparative Example 2 from "poor" to "fair," and the absence of corona treatment in Experiment 2 deteriorated the unstretched film of Comparative Example 3 from "fair" to "poor" (page 3). Appellants argue that the results establish that film from compositions disclosed by Ueda which are not corona treated have insufficient antistatic properties and the examiner finds that the comparison does not reflect the teachings of Takashi which is the closest prior art.

We find here, as we did above with respect to the specification Comparative Examples, that in the absence of an explanation of the practical significance of the results, the results as reported and explained by declarant Yamanaka are not unexpected in view of the teaching in

Takashi to use filler in the film and then stretch and oxidize it by corona discharge treatment, and, thus, as the examiner points out, there is no reasonable direct or indirect "side-by-side" comparison provided by Experiments 1 and 2 which addresses the thrust of the rejection in which Takashi, and not Ueda, is the closest prior art.

We find that declarant Yamanaka states in declaration III that Experiment 1 involves Takashi Example 12 wherein the "same composition as in Tables I(b) and II(b) and the same molding conditions as in Table III of [Takashi] were used but conditions not described in [Takashi], such as extrusion temperature, cooling temperature, etc. were replaced by those described in the present application," and that Experiments 2 and 3 involve the "same procedures" (pages 1). Notwithstanding the few differences between these conditions and those in Takashi Table III for Takashi Example 12, there are significant basic differences between the ingredients and processing conditions used in the base and paper-like layers of the synthetic papers of Experiments 1-3 (*see* Takashi Tables I(b), II(b), III and IV, and declaration III Tables 1 and 2) and the synthetic paper of "Example 1 of the Present Application" in Experiment 4 (*see* specification pages 29-31 and Table 1, page 36, and declaration III Table 2). These include, among others, the kind and amount of "Resin" (e.g., polyamide in Takashi Experiments and polyethylene in the claimed Experiment), the kind and amount of fine inorganic particulate filler, the thicknesses of the individual layers and the stretching ratios. The base layer of Takashi Example 12 contains an antistatic agent which was omitted in declaration III Experiments 1-3, and the antistatic agent of the paper-like layer of Experiment 1 has been changed to a different type than used in Takashi Example 12 as declarant Yamanaka explains (page 2). The antistatic agent used in paper-like layers of Experiments 2 and 3 is the polyetheresteramide used in specification Example 1 but in significantly reduced amounts and without a polyamide or a modified low-molecular weight polypropylene.

Based on the results for surface resistivity reported in declaration III Table 2, declarant Yamanaka explains that the resistivity for Experiment 1 initially "was somewhat improved" but "after washing with water, . . . deteriorated," while Experiments 2 and 3, with differing amount of the polyetheresteramide, initially were "somewhat improved" and "after washing with water, unchanged" (pages 4-5). Declarant Yamanaka concludes with respect to Experiment 3 that

"[b]ecause a large amount of polyetheresteramide was added, the polyetheresteramide was insufficiently dispersed, so that the surface resistivities of 10^{10} to 10^{11} Ω as described in the examples of the present application could not be obtained" (pages 4-5). Claimed Experiment 4 was improved before washing with "clear improvement after washing" (page 5). The offset printing results are reported using the symbols "◎," "Δ," and "X" as defined (page 5), that is, acceptable, poses problems in practical use and unacceptable. On this basis, the synthetic paper of Experiment 1, containing an antistatic agent disclosed by Takashi, was unacceptable as was the synthetic paper of Experiment 2, containing the same amount of polyetheresteramide, and the synthetic paper of Experiment 3, containing a greater amount of polyetheresteramide, poses problems in practical (pages 5-6). The claimed synthetic paper of Experiment 4, containing the polyetheresteramide, polyamide and modified low-molecular weight polypropylene, was acceptable (page 6). Declarant Yamanaka links the results to surface resistivity (*id.*).

We find that declarant Yamanaka has demonstrated the practical effect of the difference in surface resistivity between the synthetic papers of Experiments 1-4. However, we find no direct or indirect "side-by-side" comparison in any combination of these Experiments of a claimed synthetic paper with one representing Takashi wherein the sole difference is the kind and amount of antistatic agent. *See Dunn*, 349 F.2d at 439, 146 USPQ at 483 ("The cause and effect sought to be proven is lost here in the welter of unfixed variables."). In this context, we fail to find evidence establishing that the results reported would have been unexpected by one of ordinary skill in this art in view of the combined teachings of Takashi and Ueda, and particularly since Ueda would have taught that the combination of polyetheresteramide, polyamide and modified low-molecular weight polypropylene are particularly effective in providing a "permanent antistatic" effect in polypropylene compositions, as the examiner points out. Indeed, as the examiner finds, the evidence establishes a result expected by one of ordinary skill in this art from the kind of antistatic agents employed in Takashi which results in high surface resistivity in synthetic papers as acknowledged by appellants in the specification. *See Hoffmann*, 556 F.2d at 541, 194 USPQ at 128; *Skoll*, 523 F.2d at 1397, 187 USPQ at 484; *Gershon*, 372 F.2d at 537-39, 152 USPQ at 604-05.

We agree with the examiner that the evidence in Experiment 5 of the Yamanaka III declaration, which is based on Ueda and thus, employs a polypropylene resin suitable for injection molding (declaration, e.g., pages 7 and 9-10), does not address the thrust of the rejection. Indeed, as we determined above, one of ordinary skill in this art would have selected a polypropylene resin suitable for preparing base and paper-like layers for synthetic papers in following the combined teachings of Takashi and Ueda, and there is no evidence in the declaration explaining the practical significance of the results reported in Experiment 5 in this context.

We find that declarant Yamanaka states in declaration IV that the three layer synthetic paper of Experiment 1 based on Takashi Example 12 is the same as that of Experiment 1 of declaration III; that the same three layer paper synthetic paper is used in Experiment 2 "except that corona discharge was omitted;" that the base layer and paper-like layer of the two layer synthetic paper of Experiment 3 are the same as the corresponding layers of Experiment 1; and that the paper-like single layer synthetic paper of Experiment 4 corresponds to the paper-like layer of Experiment 1 (pages 1-4; declaration Tables 1 and 2). Declarant Yamanaka further states that the synthetic paper of Experiment 5 is that of "Example 1 of the present application" and thus, is the same as that of Experiment 4 of declaration III; that that the base layer and paper-like layer of the two layer synthetic paper of Experiment 6 are the same as the corresponding layers of Experiment 5; and that the paper-like single layer synthetic paper of Experiment 7 corresponds to the paper-like layer of Experiment 5 (page 4; declaration Tables 1 and 2). Declarant Yamanaka still further states that the synthetic paper of Experiment 8 is the same as Experiment 1 except that the "0.7" antistatic agent of the paper-like layers of Experiment 1 is replaced with "66.7" parts of polyetheresteramide as set forth in declaration Table 1 (*id.*).

We find here, as we did with respect to declaration III above, that there are significant basic differences between the ingredients and processing conditions used in the base and paper-like layers of the synthetic paper of Experiment 1, representing Takashi Example 12, and the synthetic paper of Experiment 5, representing specification Example 1, and thus of Experiment 2-4 and Experiments 6 and 7. These include, as they did above, among others, the kind and amount of "Resin," the kind and amount of fine inorganic particulate filler, the thicknesses of the

individual layers and the stretching ratios. Experiment 8 further contains an amount of polyetheresteramide in excess of the amount of this ingredient alone in specification Example 1, and declarant Yamanaka discloses that the amount is "40% by weight . . . based on the resin component" which amount is at the top end of the range of this ingredient specified in appealed claim 1. There is no evidence establishing the relationship between this amount and the amount of the same ingredient in specification Example 1 (specification, pages 29-30).

The results reported for surface resistivity for the synthetic papers of Experiments 1-4 (Table 2) are characterized by declarant Yamanaka as "somewhat improved" before washing, but "deteriorated" after, while that of "Experiments 5 to 7 did not change as compared with that of Example 1 of the present application" (page 5). We find that the resistivity of Experiments 5-7 is as reported in declaration III (Table 2), in which declaration, declarant Yamanaka found "a clear improvement after washing," as we pointed out above. The surface resistivity reported for Experiment 8 was "somewhat improved" before washing, and "unchanged" thereafter, declarant Yamanaka stating that "[b]ecause a large amount of polyetheresteramide was added, polyetheresteramide was insufficiently dispersed, so that the surface resistivities of 10^{10} to 10^{11} Ω as described in the Examples of the present application could not be obtained" (pages 5-6).

The offset printing results are reported using the symbols "◎," "Δ," and "X" without definition (page 6 and Table 2). Declarant Yamanaka concludes that the suitability of synthetic papers of Experiments 1-4 were "X" while that "of each of Experiments 5 to 7 were similar to those of" specification Example 1, and that of Experiment 8 was "Δ" (page 6).

We agree with the examiner that the objective evidence in the Yamanaka IV declaration is not persuasive for the same reasons as the evidence in Yamanaka III declaration (*see above* p. 21). On this basis, we thus agree with the examiner's finding that the results shown in the Yamanaka IV declaration, including that of Experiment 8, constitute evidence of results expected by one of ordinary skill in this art from the kind of antistatic agents employed in Takashi as acknowledged by appellants in the specification.

Turning now to appellants' arguments with respect to claims 30 through 34, 38 and 46 through 49 (brief, pages 17-18), we agree with the examiner's findings in these respects (answer, pages 17-18), to which we add the following. We find no specified limitation with respect to

"cracks on the surface of the stretched film" (brief, page 17; original evidence deleted) in appealed claims 30 and 31; the requirement for the stretched film having "ultrafine cracks on a surface" appearing in claim 28, which issue we have considered (*see above* pp. 6 and 14).

Accordingly, based on our consideration of the totality of the record before us, we have weighed the evidence of obviousness found in the combined teachings of Takashi, Ohba and Ueda with appellants' countervailing evidence of and argument for nonobviousness and conclude that the claimed invention encompassed by appealed claims 1 and 28 through 49 would have been obvious as a matter of law under 35 U.S.C. § 103(a).

The examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (2005).

AFFIRMED

EDWARD C. KIMLIN)
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)
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Administrative Patent Judge) APPEALS AND
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)
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